

REMARKS

I. Amendments to the Specification and the Claim

In the Office Action, the Office asserts that the incorporation of essential material in the specification by reference to a foreign application (i.e., Danish patent application DK PA 2002 00875) at the Specification page 5, line 24-31, is improper. See Office Action at pages 2-3. In response, Applicants amend the Specification under 37 C.F.R. § 1.57(f) to incorporate the material from Danish patent application DK PA 2002 00875 (“DK ‘875 application”). A copy of the DK ‘875 application was submitted to the Office in the Information Disclosure Statement dated July 8, 2009, and the support for the amendments can be found in the DK ‘875 application, at page 38, line 29 to page 43, line 3. Accordingly, no new matter is added by this amendment.

Without prejudice and disclaimer, Applicants further amend claim 1 to recite “wherein the one or more pH active groups is linked to the substrate via at least one quinone” Support for the amendments can be found in the specification, as amended. Accordingly, no new matter has been added by the amendments.

II. Rejection under 35 U.S.C. § 112 (a)

The Office rejects claim 1 under 35 U.S.C. § 112, ¶ 1, as allegedly failing to comply with the enablement requirement. Office Action at page 4. Specifically, the Office alleges:

Examples 1 and 2 only mention using quinone. Moreover, the quinone does not appear to be for linking any pH active groups as the quinone is used to functionalise material H1010, which is located in circular separating groove 1, while the pH active groups (IEF electrode strip and gel) are located in grooves 6 and 7, that is, separate from quinone functionalized material H1010. Thus, Applicant's only guidance on how to make a link of the one or more pH active

group to the substrate via one of the listed groups is reference to Danish patent application DK PK 2002 00875. Since Applicant views feature added by amendment as being inventive over the prior art and non-obvious Applicant's silent on how to link the one or more pH active groups via one the listed groups renders the claim not enable.

Id. at 4. Applicants respectfully disagree with and traverse the rejection for the following reasons.

The standard for determining whether the specification meets the enablement requirement is whether "the experimentation needed to practice the invention is undue or unreasonable." *United States v. Teletronics Inc.*, 857 F.2d 778, (Fed. Cir. 1988). In addition, the M.P.E.P. expressly teaches that "[a]s long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of 35 U.S.C. 112 is satisfied." M.P.E.P. § 2164.01(b) citing *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

Here, Applicants submit that N-[4-(3-aminopropyl)morpholy]-9,10-anthraquinone-2-carboxamide (AQ-03) used in Example 1 is a **combination** of a quinone and a pH active component. And since Example 1 of the present application teaches how to functionalize the polyester material H1010 with AQ-03 (see as-filed Specification at page 17, lines 24-32), the specification does provide guidance on how to functionalize a substrate with a combination of a quinone and a pH active component. Applicants further submit that Examples 4 and 5 of the DK '875 application, which were incorporated by reference in this application, also describe how to link the quinones and pH active groups to the substrate.

Accordingly, based on the teachings in the specification and the information provided in the DK '875 application, one of ordinary skill in the art would have been able to practice the claimed invention without undue experimentation. Applicants respectfully request that the rejection be withdrawn.

III. Rejection under 35 U.S.C. § 103 (a)

A. Wiktorowicz in view of Zanzucchi, Simpson, and Cahill

The Office rejects claim 1 under 35 U.S.C. § 103 (a) as allegedly being unpatentable over U.S. Patent No. 6,214,191 to Wiktorowicz ("Wiktorowicz") in view of U.S. Patent No. 5,755,942 to Zannzucchi et al. ("Zannzucchi"), U.S. Patent No. 6,143,152 to Simpson et al. ("Simpson"), and European Patent Application Publication No. EP 1 044 716 to Cahill et al. ("Cahill") for the reasons stated at pages 6-9 of the Office Action. Applicants respectfully disagree with and traverse the rejection for the reasons of record and for the following additional reasons.

"In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." M.P.E.P. § 2141.02(I) (internal citations omitted; emphasis in original). Moreover, all claim limitations must be considered. See M.P.E.P. § 2143.03.

Here, as discussed in the Response submitted November 23, 2009, Applicants continue to assert that Cahill does not explicitly teach "a separating coating with a thickness of between 0.01 and 15 μm carried on a substrate." Moreover, neither Cahill nor Wiktorowicz teaches that "the one or more pH active groups is linked to the

substrate via at least one **quinone**,” let alone the chemical formulae (i.e., combinations of quinone and pH active component) recited in amended claim 1.

Zanzucchi or Simpson does not remedy the many deficiencies of Wiktorowicz and Cahill. Accordingly, the presently claimed invention is not obvious in view of Wikorowicz, Cahill, Zanzucchi, and Simpson. Applicants respectfully request the rejection be withdrawn.

B. Liu in view of Zanzucchi, Simpson, and Cahill

The Office rejects claim 1 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,676,819 to Liu et al. (“Liu”), Zanzucchi, Simpson, and Cahill for the reasons stated at pages 10-13 of the Office Action. Applicants respectfully disagree and traverse the rejection for the reasons of record and for the reason that none of the cited references teaches or suggests that (1) the one or more pH active groups is linked to the substrate via at least one **quinone**; and (2) the chemical formulae (i.e., the combinations of quinone and pH active component) recited in claim 1. Accordingly, no *prima facie* case of obviousness in view of the cited references. Withdrawal of the rejection is respectfully requested.

C. Lee in view of Zanzucchi, Simpson, and Cahill

The Office rejects claim 1 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,974,526 to Lee et al. (“Lee”), Zanzucchi, Simpson, and Cahill for the reasons stated at pages 13-16 of the Office Action. Applicants respectfully disagree and traverse the rejection for the reasons of record and for the reason that none of the cited references teaches or suggests that (1) the one or more pH active groups is linked to the substrate via at least one **quinone**; and (2) the chemical formulae (i.e., the

combinations of quinone and pH active component) recited in claim 1. Accordingly, no *prima facie* case of obviousness in view of the cited references. Withdrawal of the rejection is respectfully requested.

III. Conclusion

In view of the foregoing amendments and remarks, Applicants submit that the claimed invention is enabled and not obvious in view of the prior art references cited by the Office. Applicants therefore respectfully request reconsideration of this application and the timely allowance of the pending claim.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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